

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 02/09/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/850,206	05/07/2001	Michael Chung-Ta Chiang	1100-113	9723	
23869	7590 02/09/2004		EXAMINER		
HOFFMANN & BARON, LLP			ABRAMS, NEIL		
6900 JERICH SYOSSET, N			ART UNIT PAPER NUMBI		
D. 000 2 1, 1.			2839	-	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	_	
Office Action Summary	54/030200		O A 14-24	
Once Action Gammary	+brams		Group Art Unit	
-The MAILING DATE of this communication appears of	on the cover sheet be	neath the co	respondence ad	ldress-
Period for Reply	2			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, such period shall, by default, - Failure to reply within the set or extended period for reply will, by statu. - Any reply received by the Office later than three months after the mailin term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however by within the statutory minimal expire SIX (6) MONTHS from te, cause the application to	r, may a reply b murn of thirty (3 m the mailing d	0) days will be conside ate of this communic IDONED (35 U.S.C. §	K (6) MONTHS dered timely. ation. 133).
Status				
☐ Responsive to communication(s) filed on				
☐ This action is FINAL.				
 Since this application is in condition for allowance except f accordance with the practice under Ex parte Quayle, 1935. 		ecution as t	o the merits is c	losed in
Disposition of Claims				
Claim(s)	is/are p	is/are pending in the application.		
Of the above claim(s)	is/are w	is/are withdrawn from consideration.		
□ Claim(s)	is/are a	is/are allowed.		
Claim(s) / - ZC	is/are re	is/are rejected.		
□ Claim(s)	is/are o	is/are objected to.		
□ Claim(s)			ject to restriction of	or election
Application Papers		require		
☐ The proposed drawing correction, filed on	• •	☐ disapprove	od.	
☐ The drawing(s) filed on is/are objected	d to by the Examiner			
☐ The specification is objected to by the Examiner.				
☐ The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. § 119 (a)-(d)				
 Acknowledgement is made of a claim for foreign priority un All □ Some* □ None of the: □ Certified copies of the priority documents have been rec □ Copies of the certified copies of the priority documents in this national stage application from the International I *Certified copies not received: 	seived. seived in Application No have been received). 		
Attachment(s) 2-she	e fs			

Office Action Summary

Information Disclosure Statement(s), PTO-1449, Paper No(s).

Notice of Reference(s) Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

U.S. Patent and Trademark Office PTO-326 (Rev. 11/00)

☐ Interview Summary, PTO-413

□ Other _

☐ Notice of Informal Patent Application, PTO-152

Application/Control Number: 09/850,206

Art Unit: 2839

Abstract, at end following should be added; --Contact free ends (345) may be captured in a shot in the housing and the housing (112) may include a flexible extent to provide increased contact pressure upon mating--.

Current drawings in case are noted to be informal. Page 8, line 14 spelling error.

Spec page 12 refers to a reload window 217, figs 17, 17a, but just how it operates is not referred to none seen clearly described or shown. Page 13, line 16, what "shot" is in figs. Fig 11, the staple-like" fold should be shown. Page 10, line 29 "117" not seen in figs; should be added at least to Fig 13.

Applicant is required to submit a proposed drawing correction in reply to this Office

Action. However, formal correction of the noted defect can be deferred until the application is

allowed by the examiner.

Claim 15 dependancy is incorrect.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claim 6 contact free end movably disposed in a slot in the housing must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

This aspect should be clearly depicted, see Buicaud, Fig 6.

Claim 14-17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 14, 15, "flexible planar portion" and its use are inadequately shown and

Application/Control Number: 09/850,206 Page 3

Art Unit: 2839

described see spec, figs 12, 13 and page 11, lines 12-16. Numerals should be added and used in a clear description of use of this feature.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 14-17, 18 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niitsu taken in view of Anhalt, Burton, Lok and Matsuaka.

For claim 1, Niitsu system is for use on a pcb and includes planar housing 2, contacts 3 supported by the housing and having interior deflectable portions 24, exterior portions 18 for solder connection to the pcb and mid portions 16 mounted in the housing: Niitsu is not for use with a LCD. Burton diploses a spring connector, fig 3, for use with and LCD. It would have been obvious to form the Niitsu system for use with an LCD that being a standard element of circuit packages as shown by Burton.

For claims 2, 18, 19, 10, 11, 12, 16, 17, Niitsu pins 14 are not disclosed as securement means, and his contact is not secured by barbs and contact 3 does not include a hole for plastic to flow. Anhalt uses pins 31 as securement means. Obvious to so form Niitsu pins 14 enable tatachment to the pcb before soldering. Matseoka uses barbs 12c for securement. Obvious to similarly form Niitsu system with securement by barbs, rather than molding this enabling easy design changes. Lok shows a contact with an opening 26 for flow of mold material. Obvious to

Art Unit: 2839

use such feature in Niitsu for better securement of the contact to the housing. For claim 4, Niitsu contact portion 22, 24, 26 forms a cantilever member.

For claims 3, 4, Niitsu contact part 26 is seen as undulating shape. In addition, note undulating shape of Lok contact at 14. Obvious to so form the Niitsu contact, such change producing no stated advantage. For claims 14, 15, Niitsu planar portion is not disclosed to be flexible at portions 8, 4. However flexibility is often present in thin members and claims 14, 15 limitations in absence of recited purpose, i.e, "to increase electrical connection contact pressure on the LCD" does not overcome the reference. Claims 8, 9, met by Niitsu disclosure and in addition molding step as suggested by Lok applicable to Niitsu.

Claim 1, 6, 8, 10, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Lok, Burton and Matsuoka.

Wu, figs 2, 4A includes planar housing 12, contacts with exterior portions 40, interior portions 26, 32 with a reverse bend mid section at 18 and a free end within the housing. The system is not used for an LCD and contact extend 28 (claim 6) might not be readable as an undulating shape. Obvious to use the system with a LCD in view of Burton, for reasons discussed above. Also obvious to form contact 28 to be of undulating shape in view of Matsuoka at 16 and Lok at 14, such change would provide a more distinct contacting position on the terminal. Wu, so applied also meets claims 8, 10, 11 and 20.

Claim 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vacheron in view of Burton and Matsuoka.

Application/Control Number: 09/850,206

Art Unit: 2839

Vacheron fig, 3 discloses a contact housing 110 with a contact 40 having a mid portion in the

housing an interior folded spring portion 50, 60 (on left) and an exterior solder to pcb portion 60

(or right). The portions 60, 60 being coplanar. Vacheron does not disclose LCD use or clearly

disclose contact securement to the housing. Burton discloses LCD use and Matsuoka discloses

securement by barbs. Obvious to use these features in Vacheron device for reasons discussed

above.

Claim 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seidler in

view of Burton.

Seidler system, fig, 6 includes housing 12, contact 11 with interior deflectable portion 16b,

interior extent 14 for connection to a pcb C1 and bendable lines 17, 19 for securement to the

housing.

For claim 1, Seidler does not disclose LCD use. For this feature, Burton is applied as

discussed above.

Kihira is cited to show a pcb connector like that of Niitsu.

Any inquiry concerning this communication should be directed to N. Abrams at telephone

number (703) 308-1729.

Page 5

ART UNIT 322

N ABRAMS/ac

01/28/04